



SUSQUEHANNA RIVER
BASIN COMMISSION

4423 N. Front Street | Harrisburg, PA 17110-1788 | 717.238.0423 | srbc.net

NY ■ PA ■ MD ■ USA

June 8, 2018

Ms. Heather Burkhardt, Regulatory Manager
BKV Operating, LLC
12231 State Route 706
Montrose, PA 18801

Re: Notice of Transfer of Approval;
from Warren Marcellus LLC
to BKV Operating, LLC;
One Commission Docket Approval and 13 Approvals by Rule (see Table 1)

Dear Ms. Burkhardt:

The Susquehanna River Basin Commission (Commission) received a Request for Transfer of Approval (Commission Form #86) on April 5, 2018, and a revised Form #86 on April 24, 2018, for one (1) Docket approval and thirteen (13) Approvals by Rule (see Table 1). Commission Form #86 indicated the change in ownership was effective January 31, 2018, from Warren Marcellus LLC to BKV Operating, LLC (BKV). Upon review of the projects and the submitted request for transfer, it was determined that the request is substantially in compliance with the regulations and consistent with Commission Regulation 18 CFR § 806.6(a). Therefore, the approvals listed on Table 1 are hereby transferred effective June 8, 2018.

Copies of the approvals listed on Table 1 are available on the Commission's Water Application and Approval Viewer (WAAV) at mdw.srbc.net/waav.

Please note that BKV may operate under the terms and conditions of the transferred approvals not inconsistent with the conditions of this transfer, provided that:

1. Within 120 days from approval of this transfer request, BKV shall post updated signage that meets Commission specifications and displays required project description information. Signage specifications can be found at the Commission's website (www.srbc.net), under "Forms & Applications," along with example sign templates for reference. The signage shall be maintained for the duration of the approvals. Such signs shall be posted at the point of entry or access to the project facility from a public right-of-way. If there is any restriction to access at such point that would prevent an interested person from legibly viewing such sign, then BKV shall post the sign at the nearest location to such point, along the route of ingress and egress to same, where an interested person would have unrestricted access to legibly

view such sign. BKV shall submit photographs as proof of installation of the updated signage.

2. In accordance with the Commission's Regulatory Program Fee Schedule, these projects continue to be subject to the Annual Compliance and Monitoring fee (ACMF). The ACMF is contained in the Regulatory Program Fee Schedule adopted annually by the Commission. The ACMF will be invoiced separately and may be modified over the term of the transferred approvals.

Please be advised that this transfer is contingent upon compliance with all provisions of the Susquehanna River Basin Compact (Compact), as well as the Commission's rules, regulations, approvals, conditions of approval, and any other requirements of the Commission. It is your obligation to fulfill all conditions of this approval within the specified time limits and provide written notification to the Commission, as appropriate, and comply with all conditions set forth therein. Failure to meet any term or condition within the specified time may subject you to enforcement action and imposition of civil penalties pursuant to Commission Regulation 18 CFR Section 808, Subpart B, § 808.15, and Section 15.17 of the Compact. Penalties range from \$50 to \$1,000 per day, per condition (which includes exceeding approved quantities), with every day being a separate offense.

Pursuant to Commission Regulation 18 CFR § 808.2 relating to administrative appeals, an appeal to this action must be made to the Commission within 30 days of receipt of this notice. All appeals must be made in writing on the Commission's Notice of Appeal form and conform to the requirements of Commission Regulation 18 CFR § 808.2. Pursuant to Commission Regulation 18 CFR § 808.2(i), an appeal made under this section stays the commencement of the 90-day appeal period contained in Section 3.10(6) of the Compact.

Should you have any questions, please contact Todd Eaby, Manager of Project Review, at (717) 238-0423, extension 1234, or via e-mail at teaby@srbc.net.

Sincerely,



Andrew D. Dehoff
Executive Director

Enclosure: Table 1

cc: Ethan Ngo – BKV Operating, LLC, Denver, CO
Andrew Klinger – PADEP-Williamsport, PA

Table 1

List of SRBC Docket and Approval by Rule Numbers
 Approved for Transfer from Warren Marcellus LLC to BKV Operating, LLC

Docket/ABR #	Source/Pad Name	Municipality	County/State	Type of Approval
ABR-201106009.R1	Johnston 1 Pad	Meshoppen Township	Wyoming/PA	Consumptive Use
ABR-201201010.R1	Macialek 1 Pad	Washington Township	Wyoming/PA	Consumptive Use
ABR-201110002.R1	Mattocks 1	Washington Township	Wyoming/PA	Consumptive Use
ABR-201110003.R1	McConnell 1	Tunkhannock Township	Wyoming/PA	Consumptive Use
ABR-201008138.R1	Mirabelli Pad 1-1H	Washington Township	Wyoming/PA	Consumptive Use
ABR-201008156.R1	P&G Warehouse 1-1H	Meshoppen Township	Wyoming/PA	Consumptive Use
ABR-20091104.R1	Procter & Gamble Mehoopany Plant 2 1H	Washington Township	Wyoming/PA	Consumptive Use
ABR-20100126.R1	Procter & Gamble Mehoopany Plant 3V	Washington Township	Wyoming/PA	Consumptive Use
ABR-20100125.R1	Procter & Gamble Mehoopany Plant 4V	Washington Township	Wyoming/PA	Consumptive Use
ABR-20100127.R1	Procter & Gamble Mehoopany Plant 5V	Washington Township	Wyoming/PA	Consumptive Use
ABR-20091014.R1	Procter and Gamble Mehoopany Plant 1V	Washington Township	Wyoming/PA	Consumptive Use
ABR-201110001.R1	Reimiller 1	Meshoppen Township/Washington Township	Wyoming/PA	Consumptive Use
ABR-201008001.R1	Ruark East 1 1H	Washington Township	Wyoming/PA	Consumptive Use
20170613	North Branch Susquehanna River	Washington Township	Wyoming/PA	Surface Water



SUSQUEHANNA RIVER BASIN COMMISSION

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Docket No. 20170613

Approval Date: June 16, 2017

WARREN MARCELLUS LLC

Surface Water Withdrawal (Peak Day) of up to 0.999 mgd from the Susquehanna River

Section 1. Approval

After review of the record, including the technical findings of Susquehanna River Basin Commission (Commission) staff, the Commission has determined that no significant adverse impacts are anticipated by the operation of this project as described and conditioned herein, the project is physically feasible, and does not conflict with or adversely affect the Commission's Comprehensive Plan. Accordingly, the Commission hereby approves renewal of the project described herein in accordance with the conditions set forth below.

This approval is a renewal and modification of Commission Docket No. 20130305 that was originally approved March 21, 2013, with a peak day withdrawal rate of 1.000 million gallons per day (mgd) and no special flow protection requirements. The approval was originally issued to Citrus Energy and transferred to Warren Marcellus LLC, effective September 24, 2014. The project sponsor has requested a reduction in the peak day withdrawal from 1.000 mgd to 0.999 mgd, and an increase in the instantaneous withdrawal rate from 1,385 gallons per minute (gpm) to 1,388 gpm. Following technical review, and consistent with applicable regulatory standards, Commission staff recommended that the requested increased instantaneous withdrawal rate of 1,388 gpm be approved, herein referred to as the modified rate. Commission staff also recommended special flow protection requirements consistent with current policy. This approval incorporates those recommendations.

Commission staff has coordinated with the Pennsylvania Department of Environmental Protection (PADEP), the Department of Conservation and Natural Resources (DCNR), and the Pennsylvania Fish and Boat Commission (PFBC) during review of this project.

Section 2. Project Information

Information concerning the project sponsor, water use type, and location are set forth in the table below.

Project Information	
Project Sponsor:	Warren Marcellus LLC
Approval Type:	Surface Water Withdrawal
Past Docket No.:	20130305
Authorized Water Use Purpose:	Hydrocarbon Development and Related Incidental Uses
Municipality:	Washington Township
County:	Wyoming County
State:	Pennsylvania

Section 3. Source Information

Information concerning the source of water from which the withdrawal will be made is set forth in the table below.

Source Information	
Approved Source:	Susquehanna River
Subbasin:	Middle Susquehanna
Watershed Boundary Dataset (WBD):	0205010614 (Lower Susquehanna River)
Water Use Designation:	Warm Water Fishery (WWF)
Withdrawal Location (degrees):	Lat: 41.568065 N Long: 76.036389 W
Site Flow Statistics (cfs):	Q7-10 = 659; Average Daily Flow = 13,100
Impairment:	Mercury; Polychlorinated Biphenyl (PCB)
Drainage Area (square miles):	8,870
Aquatic Resource Class*:	6
Special Flow Protection Required:	Yes
cfs – cubic feet per second	
* Refer to Commission Policy No. 2012-01 (Low Flow Protection Policy Related to Withdrawal Approvals)	

Section 4. Approved Withdrawal Quantities and Limitations

The withdrawal approved hereunder is subject to the quantitative limits and restrictions set forth in the table below.

Approved Withdrawal Quantities and Limitations	
Peak Day Withdrawal Amount (mgd):	0.999 (Not to Exceed, When Available)
Maximum Instantaneous Withdrawal Rate (gpm):	1,388 (Not to Exceed)
Flow Protection Type:	Seasonal passby expressed as monthly values
Method for Monitoring Flow Protection:	Off-site monitoring of USGS Real-Time Gage 01533400; Susquehanna River at Meshoppen, Pennsylvania

Approved Withdrawal Quantities and Limitations (continued)		
Passby Schedule:		
<i>Month</i>	<i>On-Site Flow Protection Rate (cfs)</i>	<i>Off-Site Monitoring Threshold for Flow Protection (cfs)*</i>
January	--	--
February	--	--
March	--	--
April	--	--
May	--	--
June	--	--
July	1,140	1,130
August	837	827
September	801	791
October	1,050	1,040
November	--	--
December	--	--
1 cfs = 448.8 gpm		USGS – U.S. Geological Survey
* Flow Protection Threshold		-- – No special flow protection required

The withdrawal is also subject to all other conditions set forth in this docket approval.

Section 5. Standard Conditions

1. The project sponsor shall comply with all Commission regulations, 18 CFR Parts 801, 806, and 808. This project is subject to the Annual Compliance and Monitoring fee as specified in the Commission’s Regulatory Program Fee Schedule, which may be modified over the term of the approval.

2. The project sponsor shall adhere to the metering plan reviewed and approved by Commission staff. Any modifications proposed for the metering plan shall be submitted for review and, if appropriate, approval by Commission staff in accordance with Commission Regulation 18 CFR § 806.30. Modifications shall not be made until the project sponsor receives written approval of the amended plan.

3. The project sponsor shall maintain metering on the withdrawal in accordance with Commission Regulation 18 CFR § 806.30.

4. The project sponsor shall maintain the totalizing meter and other flow and volume measuring devices, accurate to within five (5) percent, so as to provide an accurate record of withdrawals, and certify to the Commission once every five (5) years, or as otherwise requested, the accuracy of all measuring devices and methods to within five (5) percent of actual flow.

5. The project sponsor shall adhere to the intake design reviewed and approved by Commission staff. Any modifications proposed by the project sponsor for the permitted intake

structure shall be submitted for review and, if appropriate, approval by Commission staff in accordance with Commission Regulations 18 CFR § 806.21 and § 806.23 prior to undertaking such modification(s).

6. The project sponsor shall keep daily records of the project's withdrawal and shall report the data to the Commission quarterly, and as otherwise required, in the form and manner as prescribed by Commission staff. Quarterly monitoring reports shall be submitted online and are due within thirty (30) days after the close of the preceding quarter. Any alternative measuring, monitoring, or accounting procedure requested by the project sponsor shall be submitted for review and approval by Commission staff in accordance with Commission Regulation 18 CFR § 806.30. Modifications shall not be made until the project sponsor receives written approval of the amended plan. All data collected and submitted as required under this approval shall be maintained by the project sponsor for the duration of the approval and all subsequent renewals.

7. Within sixty (60) days from notice of this approval, the project sponsor shall post an updated sign that meets Commission specifications and displays required project description information. Signage specifications can be found at the Commission's website (www.srbc.net), along with example sign templates for reference. The sign shall be maintained for the duration of the approval. Such sign shall be posted at the point of entry or access to the project facility from a public right-of-way. If there is any restriction to access at such point that would prevent an interested person from legibly viewing such sign, then the project sponsor shall post the sign at the nearest location to such point, along the route of ingress and egress to same, where an interested person would have unrestricted access to legibly view such sign. The project sponsor shall submit photographs as proof of installation of the updated sign.

8. The project sponsor or any other person representing the project sponsor shall allow authorized employees or agents of the Commission, without advance notice, at any reasonable time and upon presentation of appropriate credentials, and without delay, to have access to and to inspect all areas where the project is being constructed, operated, or maintained, or otherwise exercise all investigative powers authorized under Commission Regulation 18 CFR § 808.12.

9. In accordance with Commission Regulation 18 CFR § 806.30(b)(2), the project sponsor shall report violations of any withdrawal limits and any conditions of this approval within five (5) days of such violation or report loss of measuring or recording capabilities required under Commission Regulation 18 CFR § 806.30(a)(1) within five (5) days after any such loss.

10. In accordance with Commission Regulation 18 CFR § 806.6, if ownership of the project changes or if the project sponsor undergoes a name change, the project sponsor shall submit application for transfer or reissuance of this approval to the Commission within ninety (90) days of the change in ownership or project sponsor name change.

11. The project sponsor shall comply with the water conservation requirements specified in Commission Regulation 18 CFR § 806.25.

12. This approval is conditioned on the project sponsor maintaining legal access to the withdrawal location for the duration of the approval.

13. The project sponsor shall register with the appropriate agency all surface water sources described herein, as may be required by regulations of the member jurisdiction.

14. If the project sponsor fails to comply with the provisions of the Susquehanna River Basin Compact or any rule, regulation, or order of the Commission, or any term or condition of this docket, the project sponsor is subject to enforcement actions pursuant to Commission Regulation 18 CFR Part 808.

15. Commission approval shall not be construed to exempt the project sponsor from obtaining and maintaining all necessary permits and/or approvals required for the project from other federal, state, or local government agencies having jurisdiction over the project. All such permits and/or approvals shall be obtained prior to the withdrawal of water. The Commission may modify, suspend, or revoke this approval if the project sponsor fails to obtain or maintain such permits and/or approvals.

16. The Commission may at any time reopen any project approval or issue such additional orders, as may be necessary, to mitigate or avoid adverse impacts or otherwise to protect public health, safety, welfare, or the environment, pursuant to Commission Regulation 18 CFR § 806.32.

17. Commission approval confers no property rights upon the project sponsor. The securing of all rights necessary and incident to the project sponsor's development and operation of the project shall be the sole and exclusive responsibility of the project sponsor, and this approval shall be subject thereto.

18. This project is approved for inclusion in the Commission's Comprehensive Plan for the Water Resources of the Susquehanna River Basin.

19. In accordance with Commission Regulation 18 CFR § 806.31(d), if the project is discontinued for such a time and under such circumstances that an abandonment of the project may be reasonably inferred, the Commission may rescind the approval of the project.

20. The project sponsor is required to apply for and obtain approval prior to any increase in withdrawal that would exceed the amounts listed herein.

Section 6. Special Conditions

21. Effective July 1, 2017, the project sponsor shall cease all withdrawals from the approved source when streamflow, as measured at the U.S. Geological Survey stream gage specified in Section 4, is less than the applicable flow protection threshold specified in Section 4, and shall not reinstate withdrawals until the streamflow is equal to or exceeds such flow protection threshold.

22. The project sponsor shall, on a daily basis, collect and record streamflow as measured at the U.S. Geological Survey stream gage specified in Section 4, and shall report the data to the Commission quarterly, and as otherwise required, in the form and manner as prescribed by Commission staff. Quarterly monitoring reports shall be submitted online and are due within thirty (30) days after the close of the preceding quarter. The project sponsor may propose alternative flow monitoring to the Commission for staff review and, if appropriate, approval.

23. The date of the last meter certification was February 16, 2016; therefore, the next meter certification is due no later than February 16, 2021. Certification of meter accuracy shall be provided to the Commission no less frequent than once every five (5) years from the date of the last certification.

24. The project is fully constructed and no physical changes are proposed. However, if changes are proposed or maintenance requires instream work, the project sponsor should adhere to recommendations provided by PFBC in the August 22, 2016, Pennsylvania Natural Diversity Inventory (PNDI) response for avoiding adverse impact to documented occurrences of rare species at or in proximity to the project location. The documented species are the elktoe mussel (*Alasmidonta marginata*), triangle floater mussel (*Alasmidonta undulata*), and green floater mussel (*Lasmigona subviridis*).

25. Except as authorized pursuant to Special Condition 27, the project sponsor shall only supply water for use in hydrocarbon development to persons who have properly registered this approval pursuant to Commission Regulation 18 CFR § 806.22(f)(12).

26. The project sponsor shall keep daily records, and shall report the same to the Commission upon request, of all persons supplied water from the project for use in hydrocarbon development, including daily quantities supplied. The project sponsor also shall keep daily records, and shall report the same to the Commission upon request, of all persons supplied water from the project for uses other than hydrocarbon development authorized pursuant to Special Condition 27, including daily quantities supplied.

27. Prior to supplying water for any use not authorized pursuant to Section 2 of this approval, the project sponsor shall first submit a request for minor modification under Commission Regulation 18 CFR § 806.18(c)(4) for such new use to the Executive Director. The project sponsor shall not supply water for such use unless and until such authorization is granted, and pursuant to any supplemental terms and conditions contained in such approval.

28. The project sponsor shall demonstrate to the satisfaction of the Commission that appropriate controls and treatment to prevent the spread of aquatic nuisance species are employed at the water withdrawal site.

Section 7. Term


29. This approval shall be effective July 1, 2017, and shall remain effective until June 30, 2022. As specified in Commission Regulation 18 CFR § 806.31(e), if the project sponsor submits an application on or before December 31, 2021, the project sponsor may continue

operation of this project pursuant to the terms and conditions of this approval until such time as the Commission acts on such application, or until otherwise notified by the Executive Director.

30. Commission Docket No. 20130305 shall remain effective through June 30, 2017, whereupon it shall expire.

CERTIFICATION: I, Stephanie L. Richardson, Secretary to the Susquehanna River Basin Commission, do hereby certify that the foregoing project docket was approved by the Susquehanna River Basin Commission on June 16, 2017.

Dated: June 19, 2017


Stephanie L. Richardson